



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/724,656      | 12/01/2003  | David John St. Clair | W-0024              | 2328             |

30522 7590 11/24/2004  
KRATON POLYMERS U.S. LLC  
WESTHOLLOW TECHNOLOGY CENTER  
3333 HIGHWAY 6 SOUTH  
HOUSTON, TX 77082

EXAMINER

CHEUNG, WILLIAM K

ART UNIT PAPER NUMBER

1713

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/724,656 | <b>Applicant(s)</b><br>ST. CLAIR, DAVID JOHN |  |
|                              | <b>Examiner</b><br>William K Cheung  | <b>Art Unit</b><br>1713                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>120103</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by St. Clair et al. (US 2003/0176574 A1).

*The invention of claims 1-11 relates to a **composition** having a low Volatile Organic Compounds level comprises **100 parts** by weight of a selectively **hydrogenated block copolymer composition** dissolved in a mixture of one or more **hydrocarbon solvents and one or more VOC-exempt solvent**, wherein:*

*a. said selected **hydrogenated block copolymer composition** comprises about **20 to about 40 weight percent** of a **triblock copolymer** having the general configuration  $(A^1-B^1)_2X$  or  $A^2-B^2-A^3$  where **X** is the residue of a coupling agent and about **80 to about 60 weight percent** of a **diblock copolymer** having the general configuration  $A^1-B^1$  or  $A^4-B^3$  wherein:*

*i. prior to hydrogenation the **A<sup>1</sup>**, **A<sup>2</sup>**, **A<sup>3</sup>**, and **A<sup>4</sup>** blocks are styrene homopolymer blocks and **B<sup>1</sup>**, **B<sup>2</sup>**, and **B<sup>3</sup>** are 1,3-butadiene homopolymer blocks where about **30 to***

***about 60 mol percent of the condensed butadiene units in the B blocks have 1,2-configuration,***

***ii. subsequent to hydrogenation about 0 to 10 % of the styrene double bonds have been reduced and at least 90% of the butadiene double bonds have been reduced,***

***iii. each A<sup>1</sup>, A<sup>2</sup>, A<sup>3</sup>, and A<sup>4</sup> blocks have a number average molecular weight of about 5,000 to about 10,000, and***

***iv. the total amount of styrene in the hydrogenated block copolymer composition is 41% by weight to about 50% by weight, and***

***b. the weight ratio of VOC-exempt solvents to hydrocarbon solvent is about 35:65 to about 65:35.***

St. Clair et al. (page 9, Table 9) disclose compositions of hydrogenated block copolymer composition dissolved in a mixture of one or more hydrocarbon solvents and one or more VOC-exempt solvent. St. Clair et al. (page 9, Claims 1, 9) clearly indicate a composition further comprises a tackifying resin selected from the group consisting of C<sub>5</sub> hydrocarbon resins, C<sub>5</sub>/C<sub>9</sub> resins. St. Clair et al. (page 4, paragraph 0031) disclose various types of fillers and pigments, such as the especially preferred titanium dioxide, which can be included into the composition. Further, St Clair et al. (page 5, paragraph 0033) indicate that the antioxidant can be included into the resin composition.

St. Clair et al. contain all the limitation of claims 1-9. Claims 1-9 are anticipated.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claim 10 is rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over St. Clair et al. (US 2003/0176574 A1).

In view of paragraph 3 of instant office action, the invention of claim 10 is substantially identical in composition. Therefore, in view of substantially identical composition disclosed in St. Clair et al. and the composition being claimed in claim 10, the examiner has a reasonable basis that the claimed viscosity property of claim 10 is inherently possessed in St. Clair et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show

otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

### ***Allowable Subject Matter***

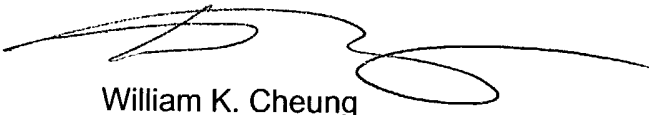
6. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. St. Clair et al. (US 2003/0176574 A1) is silent on the composition as claimed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Examiner

November 21, 2004

**WILLIAM K. CHEUNG**  
**PRIMARY EXAMINER**